# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/886,225 | 06/21/2001 | Chen-Tsai Lee | P-3641.147 | 5860 |

7590          09/08/2003

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| EXAMINER |
|---|
| YUFA, ALEKSANDR L |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2133 | 3 |

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) |
|---|---|---|---|
| **Office Action Summary** | | 09/886,225 | LEE, CHEN-TSAI |
| | | Examiner | Art Unit |
| | | Alex L. Yufa, Ph.D. | 2133 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>21 June 2001</u> .

2a)☐ This action is **FINAL**.     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-10</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10</u> is/are rejected.

7)☒ Claim(s) <u>7</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>21 June 2001</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All  b)☐ Some *  c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

| | |
|---|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4)☐ Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5)☐ Notice of Informal Patent Application (PTO-152) |
| 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6)☐ Other: . |

## DETAILED ACTION

### *Drawings*

1.      Figures 6A-9B should be designated by a legend such as --Prior Art-- because

only that which is old is illustrated.  See MPEP § 608.02(g).  A proposed drawing

correction or corrected drawings are required in reply to the Office action to avoid

abandonment of the application.  The objection to the drawings will not be held in

abeyance.

### *Specification*

2.      The following is a quotation of the appropriate paragraphs of 37 CFR 1.71 that

form the basis for the objection:

§ 1.71 Detailed description and specification of the invention.
(a) The specification must include a written description of the invention or discovery and of the manner and
process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to
enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is
most nearly connected, to make and use the same.

The disclosure is objected to as failing to describe the program claimed in claim 4.

### *Claim Objections*

3.      Claim 7 is objected to because of the following informalities:

        a)    the claim 7 should not contain the limitations placed in the parentheses

(claim 7 /page 9/, lines 2, 5).

        Appropriate correction is required.

## Claim Rejections - 35 USC § 101

4.      The claimed invention lacks patentable utility.

Claim 4 is rejected under 35 U.S.C. 101, because the claimed recitation of a use,

without setting forth the process (claim 4 recites "the test program "), results in an

improper definition of a process, i.e., results in a claim which is not a proper process

claim under 35 U.S.C. 101.  See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App.

1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C.

1966).

## Claim Rejections - 35 USC § 102

5.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed
publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-6 are rejected under 35 U.S.C. 102(a) as being anticipated by

applicant's admitted prior art (hereinafter admitted prior art).

Referring to claim 1, the admitted prior art discloses, that "conventional methods

have many different memory testing styles, the memory address accessing" (see

applicant's specification page 2, lines 7, 8). The admitted prior art teaches to provide

memory interlace check cell by cell in sequence for the row or column with no any

limitations regarding division of operation for main and/or complementary actions, and

where the first step (main step) which has at least one main address accessing datum

and commands to perform actions on each memory address, and a data checking

step, which includes an address accessing datum containing data checking commands

that check data.

According claims 2, 3 the admitted prior art discloses, that "conventional methods

have many different memory testing styles, the memory address accessing. As shown

in FIG. 6A, the matrix on the left-hand side of the drawing represents the memory. In

FIG. 6A, continuous address accessing is performed from left to right and then from top

to bottom. Another method from bottom to top is employed in FIG. 6B. FIGS. 7A and

7B show the memory address accessing performed from right to left and then from top

to bottom and from bottom to top, respectively. FIGS. 8A and 8B show the memory

address accessing performed from top to bottom and then from left to right and from

right to left, respectively. FIGS. 9A and 9B show the memory address accessing

performed from bottom to top and then from left to right and from right to left,

respectively. (see page 2, lines 7-18) " The admitted prior art teaches to provide

memory interlace check cell by cell in sequence for rows or columns, wherein the first

step performs command actions on interlacing memory rows or columns. Also, claims

2, 3 depend from respective claim 1, hence inherit the rejection in claim 1.

Referring to claim 4, the admitted prior art discloses, that "conventional methods

have many different memory testing styles, the memory address accessing" (page 2,

lines 7, 8). The admitted prior art teaches to provide memory interlace check cell by cell

in sequence and address accessing with no limitations of the length of the address

accessing data, inherently providing steps of actions with any length of the address

accessing data, including "at least a portion" (claim 4, lines 16, 17) or completed (entire) address accessing data.

According claims 5, 6, the admitted prior art does not limit and/or explicitly point out what is a content of the address accessing data, inherently providing possibility to use address accessing data for commands actions and/or checking actions. Also, claims 5, 6 depend from respective claim 4, hence inherit the rejection in claim 4.

### Claim Rejections - 35 USC § 103

6.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability, shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.      Determining the scope and contents of the prior art.
2.      Ascertaining the differences between the prior art and the claims at issue.
3.      Resolving the level of ordinary skill in the pertinent art.
4.      Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of US 4,513,374 to Hooks, Jr.

Referring to claim 7, the admitted prior art discloses, that "conventional methods have many different memory testing styles, the memory address accessing. As shown

in FIG. 6A, the matrix on the left-hand side of the drawing represents the memory. In

FIG. 6A, continuous address accessing is performed from left to right and then from top

to bottom. Another method from bottom to top is employed in FIG. 6B. FIGS. 7A and

7B show the memory address accessing performed from right to left and then from top

to bottom and from bottom to top, respectively. FIGS. 8A and 8B show the memory

address accessing performed from top to bottom and then from left to right and from

right to left, respectively. FIGS. 9A and 9B show the memory address accessing

performed from bottom to top and then from left to right and from right to left,

respectively. " (page 2, lines 7-18). The admitted prior art teaches to provide memory

interlace check cell by cell in sequence for each row or column, where the first step

(main step) performs command actions on interlacing memory rows or columns with no

any limitations regarding other possible methods of the memory cell testing access,

inherently including odd/even method of the memory row/column cell testing access.

The admitted prior art does not explicitly point out to use memory cell check in odd or

even row/column command access manner, but Hooks, Jr. teaches to provide the

operations in odd/even number manner, for example, "when the frame buffer is read,

the start address is generated ... in such a way as to produce interlaced ..." fields

requiring "sequence ... for even fields and for odd fields, so data is repeated for even

and odd fields" (column 20, lines 19-24).

Accordingly, it would have been obvious to one having ordinary skill in the art

at the time the invention was made to modify the admitted prior art with the

teaching of Hooks, Jr. by simply using the odd/even method of the memory cell

testing access, because one of ordinary skill in the art would use an odd/even memory cell row/column array to provide memory interlace check that may indicate the problem of memory cell weakening, because it is obvious to trigger memory cell in order to check the adjacent cell for possible electromagnetic interference providing the efficient detection of the memory weakening problems.

Claims 8-10 depend from respective claim 7, hence inherit the rejection in claim 7. Also, according to claims 8, 9, the admitted prior art teaches that the address unit can be the row or column, and Hooks, Jr. teaches, that the odd/even numbers approach can be used.

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the address for row and/or column in the odd/even method of the memory cell testing access, because one of ordinary skill in the art would obviously use the address unit as the row and/or column to provide an appropriate cell access in order to command (command or checking actions) memory functional operation in order to provide effective detection of the possible electromagnetic interference.

Also, referring to claim 10, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the checking command in order to provide the checking operation(s), because one of ordinary skill in the art would obviously use the some kind of command (such as checking command) to provide an appropriate

checking actions for the memory control and further effective detection of the possible electromagnetic interference.

### Conclusion

7.      The prior art made of record and not relied upon is considered pertinent to applicant's disclosure US 4,069,970.

8.      The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a).   The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a).  Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply.  The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

## Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

on _____ .
  (Date)

Typed or printed name of person signing this certificate:

_____

Signature: _____

## Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (703)_____ - _____ on _____ .
  (Date)

Typed or printed name of person signing this certificate:

_____

Signature: _____

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Yufa whose telephone number is 703-305-0715. The examiner can normally be reached on M-F 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Albert DeCady can be reached on 703-305-9595. The fax phone number

for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-

2394.

<div style="text-align: right;">

Alex L. Yufa, Ph.D.
Examiner
Art Unit 2133

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Albert DeCady
Primary Examiner

## **REFERENCES**

US 4,513,374

US 4,069,970